Claims

What is claimed is:

1. A terminal for a wireless link in a metropolitan area network, the terminal comprising:

   a. a extender device for receiving Ethernet data packets from a computer network coupled to the extender device and for forwarding the Ethernet data packets; and

   b. a broadcast device coupled to the extender device for receiving the Ethernet data packets from the extender device according to baseband transmission and having a wireless transceiver for communicating the Ethernet data packets over the wireless link.

2. The terminal according to claim 1 further comprising a cable coupled between the extender device and the broadcast device wherein the cable comprises a twisted pair of conductors for providing the Ethernet data packets from the extender device to the broadcast device.

3. The terminal according to claim 2 wherein the twisted pair of conductors is a Category 5 twisted pair of conductors.

4. The terminal according to claim 2 wherein the Ethernet data packets are Fast Ethernet data packets.

5. The terminal according to claim 1 wherein the broadcast device further comprises:

a. a microwave antenna coupled to the wireless transceiver; and

b. a housing coupled to the microwave antenna for enclosing the wireless transceiver.

6. A terminal for a wireless link in a metropolitan area network, the terminal comprising:

a. a extender device having a full-duplex Ethernet data packet regenerator for coupling a computer network to the extender device;

b. a broadcast device coupled to the extender device, the broadcast device having a full-duplex data packet transceiver for communicating Ethernet data packets with the full-duplex data packet regenerator and having an antenna for wireless communication over the wireless link wherein Ethernet data packets are communicated between the extender device and the broadcast device according to baseband transmission.

7. The terminal according to claim 6 wherein the broadcast device further comprises a housing coupled to the antenna for enclosing the full-duplex data packet transceiver.

8. The terminal according to claim 6 further comprising a cable coupled between the extender device to the broadcast device wherein the cable comprises a first twisted pair of conductors for providing the Ethernet data packets from the regenerator to the full-duplex packet transceiver.

9. The terminal according to claim 8 wherein the twisted pair of conductors is a Category 5 twisted pair of conductors.

10. The terminal according to claim 8 wherein the Ethernet data packets are Fast Ethernet data packets.

11. A terminal for a wireless link in a metropolitan area network, the terminal comprising:

a. an extender device comprising:

i. a full-duplex Fast Ethernet data packet regenerator for receiving Fast Ethernet data packets from a computer network; and

ii. a half-duplex 10BASE-T Ethernet data packet repeater for receiving 10BASE-T Ethernet data packets from the computer network; and

b. a broadcast device coupled to the extender device by a cable, the broadcast device comprising:

i. a full-duplex data packet transceiver for communicating the Fast Ethernet data packets with the full-duplex Fast Ethernet data packet regenerator;

ii. a half-duplex data packet transceiver for communicating the 10BASE-T Ethernet data packets with the half-duplex 10BASE-T data packet repeater; and

iii. an antenna coupled to the full-duplex data packet transceiver and to the half-duplex 10BASE-T data packet transceiver for wireless communication over the wireless link.

12. The terminal according to claim 11 wherein the data packets are communicated between the extender device and the broadcast device according to baseband transmission.

13. The terminal according to claim 11 wherein the cable comprises a first twisted

pair of conductors for providing the 10BASE-T Ethernet data packets from the extender device to the broadcast device.

14. The terminal according to claim 13 wherein the cable comprises a second twisted pair of conductors for providing the 100BASE-T Ethernet data packets from the extender device to the broadcast device.

15. The terminal according to claim 14 wherein the second twisted pair of conductors is a Category 5 twisted pair of conductors.

16. A method of communicating Ethernet data packets in a wireless network, wherein the method comprises steps of:

a. receiving an Ethernet data packet via baseband transmission into a broadcast device;

b. formatting the Ethernet data packet to a radio frame in the broadcast device; and

c. communicating the radio frame via a microwave antenna coupled to the broadcast device.

17. The method according to claim 16 wherein the Ethernet data packet is a Fast Ethernet data packet.

18. The method according to claim 17 further comprising a step of providing the Ethernet data packet to the broadcast device from a extender device coupled a local area network.

19. The method according to claim 18 wherein the extender device includes a data

packet regenerator for receiving Ethernet data packets from a computer network.

20. The method according to claim 19 wherein the data packet is a Fast Ethernet data packet.

21. A terminal for a wireless link in a metropolitan area network, the terminal comprising:

a. an extender device for receiving data packets from a computer network coupled to the extender device and for forwarding the data packets; and

b. a broadcast device coupled to the extender device, wherein the broadcast device comprises:

i. a layer-two network switch for receiving the data packets from the extender device according to baseband transmission; and

ii. a wireless transceiver coupled to the layer-two network switch for communicating the data packets over the wireless link.

22. The terminal according to claim 21 wherein the data packets are Ethernet data packets.

23. The terminal according to claim 22 wherein the data packets are Fast Ethernet data packets.

24. The terminal according to claim 21 further comprising a cable coupled between the extender device and the broadcast device wherein the cable comprises a twisted pair of conductors for providing the data packets from the extender device to the broadcast device.

25. The terminal according to claim 24 wherein the twisted pair of conductors is a

Category 5 twisted pair of conductors.

26. The terminal according to claim 21 wherein the broadcast device further comprises:

a. a microwave antenna coupled to the wireless transceiver; and

b. a housing coupled to the microwave antenna for enclosing the wireless transceiver.

27. The terminal according to claim 21 wherein the layer-two network switch comprises:

a. a full-duplex 100BASE-T port for receiving a first portion of the data packets from the extender device according to baseband transmission;

b. a half-duplex 10BASE-T port for receiving a second portion of the data packets from the extender device according to baseband transmission; and

c. a media independent interface (MII) coupled to the wireless transceiver.